

EARDRUM, RUPTURED

(Tympanic Membrane Perforation)



BASIC INFORMATION

DESCRIPTION

A perforation of the thin membrane (tympanic membrane) that separates the inner ear from the outer ear.

FREQUENT SIGNS AND SYMPTOMS

- Sudden pain in the ear.
- Partial hearing loss.
- Bleeding or discharge from the ear. The discharge may resemble pus within 24 to 48 hours after rupture.
- Ringing in the ear.
- Dizziness.

CAUSES

- Perforation of the eardrum when a sharp object is inserted in the ear, such as a cotton swab or paper clip to clean the ear or relieve an itch; an unseen twig on a tree.
- Sudden inward pressure in the ear, such as with a slap, a swimming or diving accident, a nearby explosion.
- Sudden outward pressure or suction, such as with a kiss over the ear.
- Severe middle-ear infection.

RISK INCREASES WITH

- Recent middle-ear infection.
- Head injury.

PREVENTIVE MEASURES

- Don't put any object into the ear canal.
- Avoid injuries that may cause a rupture (see Causes).
- Obtain prompt medical treatment for middle-ear infections.

EXPECTED OUTCOMES

- If the ruptured eardrum does not become infected, it will usually repair itself in 2 months. If it becomes infected, the infection is curable with treatment, and hearing is usually not affected permanently.
- If the perforation does not heal, surgery is needed.

POSSIBLE COMPLICATIONS

- Ear infection, with fever, vomiting and diarrhea.
- Significant blood loss (rare).
- Meningitis.
- Mastoiditis (infection of the mastoid [bony area just behind the ear]).
- Permanent hearing loss (rare).



TREATMENT

GENERAL MEASURES

- Diagnosis is verified by otoscope examination of the ear. A culture of the fluid from the ear may be done also.
- Treatment involves medication to prevent infection and supportive care for pain.
- Don't blow your nose, if possible. If you must, blow gently
- Keep the ear canal dry. Don't swim, take showers or get caught in the rain.
- Microsurgery to repair the perforation if it doesn't heal spontaneously.

MEDICATIONS

- Antibiotics to prevent or treat infections.
- Pain relievers. For minor pain, you may use non-prescription drugs such as acetaminophen.

ACTIVITY

Resume your normal activities as soon as symptoms improve.

DIET

No special diet.



NOTIFY OUR OFFICE IF

- You or a family member has symptoms of a ruptured eardrum, especially a pus-like discharge.
- The following occur during treatment:
 - Fever.
 - Pain that persists, despite treatment.
 - Dizziness that continues longer than 12 to 24 hours.
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.